

SKILLS LIST and SAMPLE TEST ITEMS

FOR

PRACTICE TEST FOR MATHEMATICS, GRADE 10

(Test items developed for skills measured in WESTEST)

Skills

- | | | | |
|-----|--|-----|-------------------------------|
| 1.0 | Numbers and Operations | 6.0 | Thinking Skills - Knowledge |
| 1.1 | Numerical Operations | 6.1 | Numbers and Operations |
| 1.2 | Scientific Notation | 6.2 | Algebra |
| 1.3 | Square Roots | 6.3 | Geometry |
| 2.0 | Algebra | 6.4 | Measurement |
| 2.1 | Write Equations | 6.5 | Data Analysis and Probability |
| 2.2 | Solve Equations | 7.0 | Thinking Skills - Analysis |
| 2.3 | Linear Functions | 7.1 | Numbers and Operations |
| 2.4 | Analyze Data | 7.2 | Algebra |
| 3.0 | Geometry | 7.3 | Geometry |
| 3.1 | Angles | 7.4 | Measurement |
| 3.2 | Figures/Proportions | 7.5 | Data Analysis and Probability |
| 4.0 | Measurement | 8.0 | Thinking Skills - Analysis |
| 4.1 | Calculate Units of
Measurement | 8.1 | Data Analysis and Probability |
| 5.0 | Data Analysis and Probability | | |
| 5.1 | Mean/Mode/Range/Standard of
Deviation | | |
| 5.2 | Probability/Predict | | |
| 5.3 | Graphs | | |

Number of questions: 49

Number of pages: 13

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(OVER)

WESTEST PRACTICE TEST IN MATHEMATICS - GRADE 10
FORM A

PART 1

DIRECTIONS: Read each problem carefully and choose the correct answer. Fill in the circle by your answer on the test. You may use a calculator on this section. Stop when you come to the word STOP.

1. The 18-speed mountain bike Diana wants to buy usually sells for \$198. It's on sale at 25% off. One way to figure her savings would be to multiply \$198 by

- (A) $\frac{1}{4}$
- (B) $\frac{2}{4}$
- (C) $\frac{4}{4}$
- (D) $\frac{35}{4}$

2. A cookie recipe calls for 1.3 ounces of walnuts for 2.5 pounds of cookies. If Lisa wants to make 12 pounds of cookies, how many ounces of walnuts will she need?

- (A) 2.04 ounces
- (B) 3.12 ounces
- (C) 5.16 ounces
- (D) 6.24 ounces

3. Simplify the following.

$$(a^2a^3)^4$$

- (A) a^9
- (B) a^{24}
- (C) a^{10}
- (D) a^{20}

4. If $x = -2$ and $y = 3$, evaluate the following expression.

$$x^2y^3 + x$$

- (A) 106
- (B) 108
- (C) 9
- (D) 11664

5. Marvin worked at the deli from November 1, 1993, until May 1, 1999. He earned 1 day of vacation for each month he worked. During this period, he did not use any of his vacation. Upon his resignation, he will be given \$15 for each unused day of vacation. How much will he receive for his unused vacation days?

- (A) \$900
- (B) \$990
- (C) \$1150
- (D) \$1170

6. Rachel sold pencils every morning for the student council. The first 4 days she sold 40 pencils each day. The last day she sold 38 pencils. How many pencils did she sell in this five day period?

- (A) 198
- (B) 298
- (C) 98
- (D) 160